

The opinion in support of the decision being entered today was *not* written for publication in a law journal and is *not* binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* RON W. ROGERS and STEPHEN J. CHASKO

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Appeal 2006-3074  
Application 10/035,464  
Technology Center 3600

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Decided: May 31, 2007

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Before TERRY J. OWENS, ANITA PELLMAN GROSS, and ANTON W. FETTING, *Administrative Patent Judges*.

GROSS, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Rogers and Chasko (Appellants) appeal under 35 U.S.C. § 134 from the Examiner's final rejection of claims 1 through 25, which are all of the claims pending in this application.

Appellants' invention relates to a system and method for securing transactional data transmitted over a wireless network in a store. The

method includes monitoring the communication activity at a store host and activating a bogus message generator at a wireless terminal in the store during periods of low activity received at the store host. Claim 1 is illustrative of the claimed invention, and it reads as follows:

1. A system for securing transactional data transmitted over a wireless network in a store comprising:

a bogus message generator coupled to a wireless terminal in a store, the bogus message generator for generating bogus messages to be transmitted by the wireless terminal;

a store host computer for receiving transactional and bogus messages from the wireless terminal; and

a communication parameter regulator for measuring a communication parameter on the store host computer, the communication parameter regulator operable to activate the bogus message generator so that the bogus message generator is activated in accordance with the measured communication parameter.

The prior art references of record relied upon by the Examiner in rejecting the appealed claims are:

Cory	US 4,262,359	Apr. 14, 1981
Nordenstam	WO 00/46959	Aug. 10, 2000
Munger	US 6,502,135 B1	Dec. 31, 2002
		(filed Feb. 15, 2000)

Claims 1 through 20 stand rejected under 35 U.S.C. § 103 as being unpatentable over Nordenstam in view of Cory and Munger.

We refer to the Examiner's Answer (mailed April 21, 2006) and to Appellants' Brief (filed January 9, 2006) and Reply Brief (filed May 25, 2006) for the respective arguments.

## SUMMARY OF DECISION

As a consequence of our review, we will affirm the obviousness rejection of claims 1 through 4, 6 through 17, and 20, but reverse the obviousness rejection of claims 5, 18, and 19.

## OPINION

At pages 5-8 of the Brief, Appellants contend that the restriction requirement was improper. However, restriction requirements are petitionable to the Director of the US Patent and Trademark Office, not appealable to the Board of Patent Appeals and Interferences. See 37 C.F.R. § 1.44 and M.P.E.P. §§ 1002.02(c)(2) and 1201. Therefore, this matter is not before us.

In addition, we note that the Examiner (Answer 5) withdrew the rejections under 35 U.S.C. §§ 101 and 112, second paragraph. Thus, the arguments at pages 9-14 of the Brief, directed to those rejections, are considered moot.

Regarding claims 1 through 3, 6, and 7, Appellants contend (Br. 15-18) that there is no motivation to combine Nordenstam, Cory, and Munger. Specifically, Appellants contend (Br. 15-17) that Nordenstam teaches using Bluetooth, wherein the terminals are slaves to a host, which acts as the master, and the terminals can only transmit data at the specific times established by the host, not continuously. Cory, on the other hand, continuously transmits data. Therefore, according to Appellants (Br. 18), to incorporate the teachings of Cory, Nordenstam would have to be redesigned in a manner that would change the principle of operation of Nordenstam's system. However, Nordenstam discloses (Nordenstam 13:6-16) that

Bluetooth is merely an example of a wireless system that can be used, and that “any wireless LAN that fulfils [certain] . . . requirements may be used by the invention.” Specifically, the terminals should be able to establish (with a delay of at most a few seconds) a connection, which may carry protocols involved in a session.

Appellants further contend (Br. 18-20) that Cory’s continuous transmission of data differs from the claimed invention of transmitting a bogus message in response to conditions sensed by a parameter regulator at the host computer. Also, Appellants contend (Br. 20-22) that although Munger discloses monitoring communication traffic and adding dummy data to communications from a terminal based on the detected traffic, the monitoring occurs at the terminal from which the dummy data is sent, not at the host computer. Accordingly, Appellants contend (Br. 20) that any combination of Nordenstam, Cory, and Munger fails to teach or suggest the claimed parameter regulator at the host computer. Thus, the first issue is whether monitoring a communication parameter at the store host computer and sending dummy data from a terminal to the store host computer in response to the measured parameter is taught or suggested by the combination of Nordenstam, Cory, and Munger.

There is no dispute that Nordenstam discloses a store host computer, a wireless network, and wireless terminals in a store in communication with the store host computer. Further, Appellants have not argued the obviousness of including traffic monitoring and dummy messages in the system of Nordenstam to defeat traffic analysis. Munger teaches (Munger, col. 4, ll. 35-42, and col. 10, ll. 14-21) adding decoy or dummy data to a communication stream during low traffic periods to prevent traffic analyzers

from detecting bursts of communication. Thus, it would have been obvious to monitor communication traffic and send dummy data during low traffic periods in Nordenstam to defeat traffic analysis.

However, as indicated by Appellants (Br. 20), Munger discloses (Munger, col. 12, ll. 26-33, and also col. 10, ll. 14-21) that each terminal sends dummy data when the terminal itself detects low traffic. Thus, Munger teaches monitoring at each terminal, not at the host computer, and sending the dummy data from any terminal at which low traffic is detected. Independent claim 1, in contrast, recites monitoring at the host computer and sending bogus messages from the terminals to the host computer.

Nonetheless, it would have been obvious to the skilled artisan that monitoring from each terminal in a store requires each terminal to include the equipment or software needed for monitoring, whereas monitoring from the store host computer requires only a single piece of equipment or software. Further, a single monitoring location (i.e., the store host) would use fewer resources than monitoring from each terminal throughout the store. Also, since the communication of interest to a traffic analyzer would be all communications sent to, and thus received by, the store host, and not the communication from any particular terminal, the more logical location for the monitoring would be at the store host computer. In other words, monitoring from the store host computer would have been a predictable variation from monitoring from the individual terminals. Accordingly, it would have been obvious to the skilled artisan to monitor received communications at the store host computer, and to provide dummy messages from the terminals to the store host computer during periods of low traffic. *See KSR Int'l v. Teleflex Inc.*, 127 S. Ct. 1727, 1740-41, 82 USPQ2d 1385,

1396 (2007). Thus, we will sustain the rejection of claims 1 through 3, 6, and 7 over Nordenstam in view of Cory and Munger, with the teachings of Cory being merely cumulative.<sup>1</sup>

Appellants contend (Br. 23) that the Munger fails to teach terminating the generation of dummy messages in response to a bona fide transaction occurring at the wireless terminal, as recited in claim 4. The second issue, therefore, is whether generating dummy messages in response to a bona fide transaction occurring at the wireless terminal would have been obvious in view of Nordenstam, Cory, and Munger. However, since Munger discloses sending bogus messages only during periods of low traffic from the wireless terminal, it naturally follows that the transmission of bogus messages should stop when actual transactions occur at the wireless terminal. Accordingly, we will sustain the obviousness rejection of claim 4.

Regarding claim 5, Appellants contend (Br. 24-25) that Munger teaches generating bogus messages based on time or on the number of messages received rather than on the bandwidth used. Further, Appellants explain (Br. 25) that although “there may be a relationship between the number of messages being received and the bandwidth used, the relationship is not direct inasmuch as the data size of the messages varies. Thus, the number of messages being received is not the same as the bandwidth being used to transmit messages.” Claim 5 recites that bogus messages are generated “in response to the computed dead space [in a communication

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<sup>1</sup> The Board may rely on fewer than all of the references applied by the Examiner in an obviousness rationale without designating it as a new ground of rejection. *In re Bush*, 296 F.2d 491, 496, 131 USPQ 263, 266-67 (CCPA 1961); *In re Boyer*, 363 F.2d 455, 458 n.2 150 USPQ 441, 444 n.2 (CCPA 1966).

bandwidth] being greater than a threshold.” The third issue, therefore, is whether generating dummy messages based on dead space in the communication bandwidth would have been obvious in view of Nordenstam, Cory, and Munger. We agree with Appellants that the teachings or suggestions of Munger are limited to traffic flow and not bandwidth, since the two do not have a direct relationship such that one would have been obvious from the other. Therefore, we will reverse the obviousness rejection of claim 5.

Regarding claims 8 and 14, Appellants contend (Br. 27) that Munger teaches generating bogus messages based on time or on the number of messages received rather than on the computational load of the host computer. The fourth issue, accordingly, is whether it would have been obvious in view of Nordenstam, Cory, and Munger to generate dummy messages based on the load of the host computer. However, Appellants (Specification 9:6-8) state that the load balancer computes an estimated load on the store host computer from the number of messages received from the terminals. As discussed *supra*, in the combination of Nordenstam, Cory, and Munger, dummy messages are generated based on the number of messages received by the host computer. Munger further discloses (Munger, col. 12, ll. 23-25) that dummy data “can also help to level the load on inactive portions of the Internet to help foil traffic analysis efforts.” Thus, Munger alludes to generating bogus messages during dead space intervals based on a determined load. Accordingly, it would have been obvious, in view of the suggestion of Munger, to calculate the load on the store host from the number of messages received and to generate bogus messages during dead

space intervals based upon the calculated load. Therefore, we will sustain the obviousness rejection of claims 8 and 14.

For claims 9 through 12, Appellants again contend that Munger fails to disclose using the number of messages received to calculate the load on the host computer. We have dealt with this issue *supra* and have determined that Munger does suggest calculating the load. Accordingly, we will sustain the obviousness rejection of claims 9 through 12.

Appellants set forth the same contentions for claims 13 and 20 as for claim 4, discussed *supra*. For the same reasons we sustained the rejection of claim 4, we will sustain the rejection of claims 13 and 20.

Regarding claims 15 through 17, Appellants again contend (Br. 31-32) that there is no motivation to combine Cory and Nordenstam because Nordenstam discloses using Bluetooth technology, which is allegedly incompatible with the continuous transmission of Cory. As we determined *supra* that Bluetooth is only an example of the wireless networks used by Nordenstam and that Cory is cumulative to the teachings of Nordenstam and Munger, we will sustain the rejection of claims 15 through 17.

Appellants contend (Br. 33) that Munger fails to disclose a bogus message timer as recited in claims 18 and 19. The last issue, therefore, is whether using a bogus message timer would have been obvious in the combination of Nordenstam, Cory, and Munger. We found *supra* that the combined teachings of the three references suggest sending dummy messages during periods of low traffic flow and until a bona fide transaction occurs at wireless terminal. Using a timer to determine when to terminate the bogus messages would conflict with ending the dummy messages when a bona fide transaction occurred. Therefore, it would not have been obvious



in view of Nordenstam, Cory, and Munger to use a bogus message timer. Accordingly, we cannot sustain the obviousness rejection of claims 18 and 19.

ORDER

The decision of the Examiner rejecting claims 1 through 20 under 35 U.S.C. § 103 is affirmed as to claims 1 through 4, 6 through 17, and 20, and reversed as to claims 5, 18, and 19.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED-IN-PART

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